

REMARKS

Information Disclosure Statement

Applicants note that an Information Disclosure Statement was duly filed on April 4, 2002 (within three months of filing the application and before the mailing of the first Office Action). However, an initialed PTO Form-1449 was not returned along with the Office Action of December 3, 2003. Therefore, Applicants respectfully request that the Examiner return an initialed PTO Form-1449 with the next official communication from the U.S. Patent and Trademark Office.

Drawings and Foreign Priority

Applicants also note that in the Office Action Summary (PTOL-326) mailed with the Office Action of December 3, 2003, there is 1) no indication whether the drawings filed with this application are acceptable; and 2) no acknowledgement of the claim for foreign priority. Applicants respectfully note that a claim for foreign priority was filed on January 22, 2002 together with a certified copy of the foreign priority document (JP 2001-016914).

Applicants respectfully request that the Examiner indicate acceptability of the drawings and acknowledge applicants claim for foreign priority in the next official communication.

Summary of Claim Amendments

Claims 12-15 are added to more particularly claim the subject matter of the invention. Support can be found in Table 1 of page 15 of the specification. No new matter

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is added.

Summary of the Official Action

1) Claims 1-10 are rejected under 35 U.S.C. §103 (a) as being obvious over U.S. Patent No. 5,891,561 (“KINOSHITA”) in view of U.S. Patent No. 4,794,041 (“GILLBERG-LAFORCE”).

The Office Action states that KINOSHITA teaches the basic claimed invention including a transmission belt comprising a rubber composition and a cord comprising benzobisoxazole fiber embedded therein. The Office Action acknowledges that KINOSHITA fails to expressly teach the treatment steps as claimed. The Office Action also states that GILLBERG-LAFORCE teaches that it is known in the art to perform several treating steps on transmission belts. The Office Action concludes that it would have been obvious to combine these two cited documents to perform the well known heating steps. The Office Action further states that, in the alternative, the claimed manipulative steps are of no patentable consequences to the patentability because the claims are directed to the article.

2) Claim 11 is also rejected under 35 U.S.C. §103 (a) as being obvious over U.S. Patent No. 5,891,561 (“KINOSHITA”) in view of U.S. Patent No. 4,794,041 (“GILLBERG-LAFORCE”).

The Office Action states that KINOSHITA teaches the basic claimed invention

including treating a fiber with an epoxy compound and further coating the fiber with a resorcinol latex adhesive material. The Office Action also states that KINOSHITA fails to expressly teach the treatment steps as claimed. The Office Action also states that GILLBERG-LAFORCE teaches that it is known in the art to perform several treating steps on transmission belts. The Office Action concludes that it would have been obvious to combine these two cited documents to perform the well known heating steps.

Response to the rejection of Claims 1-10 under 35 U.S.C. §103 (a) as being obvious over U.S. Patent No. 5,891,561 ("KINOSHITA") in view of U.S. Patent No. 4,794,041 ("GILLBERG-LAFORCE")

It is well settled that for a claim to be rendered obvious by a combination of documents, there must be some teaching or suggestion for such combination and the combined teachings must disclose every recitation of the claims. In the present application, Applicants respectfully submit that the combination of the two cited documents, even assuming there were motivation or suggestion to combine them, would not arrive at a primary treatment of the cord with a mixture of an epoxy compound and latex and a secondary treatment with resorcinol-formalin-latex.

KINOSHITA discloses the cord as being subject to a primary treatment with the epoxy compound, and a secondary treatment with resorcinol-formalin-latex. In other words, KINOSHITA fails to teach or suggest that the primary treatment also involves latex.

GILLBERG-LAFORCE discloses a single dip system and a double dip system. In

the single dip system, a primary treatment with a mixture of epoxy and latex is employed. In the double dip system, a primary treatment with an epoxy compound and a secondary treatment with resorcinol-formalin-latex is employed. Again, in GILLBERG-LAFORCE's double dip treatment, there is no latex in the primary treatment.

One of the purposes of the present invention is to improve the bondability of the cords and the transmission belt. As can be seen from Table 1 on page 15 of the specification, treating the cord with a primary solution of the mixture of epoxy and latex results in a bond strength (90-140 N/15 mm) which is much stronger than a primary treatment with only epoxy (50 N/15 mm). The use of a mixture of epoxy and latex in the primary treatment of the cord and a secondary treatment using resorcinol-formalin-latex results in an article different from and unexpectedly superior to an article treated with a different step using a different solution.

For this reason alone, the Office Action has failed to present a *prima facie* case of obviousness and the rejection should be withdrawn.

Response to the rejection of Claim 11 under 35 U.S.C. §103 (a) as being obvious over U.S. Patent No. 5,891,561 ("KINOSHITA") in view of U.S. Patent No. 4,794,041 ("GILLBERG-LAFORCE").

As discussed above, the combination of the two cited documents, even assuming there were motivation or suggestion to combine, would not arrive at a primary treatment of the cord with a mixture of an epoxy compound and latex and a secondary treatment with

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resorcinol-formalin-latex. Applicants respectfully note once again that one of the purposes of the present invention is to improve the bondability of the cords and the transmission belt.

As can be seen from Table 1 on page 15 of the specification, treating the cord with a primary solution of the mixture of epoxy and latex results a bond strength (90-140 N/15 mm) which is much stronger than a primary treatment with only epoxy (50 N/15 mm). This unexpected result is not suggested by the cited documents. Therefore, the method of claim 11 is not rendered obvious by the combination of the cited documents and the rejection should be withdrawn.

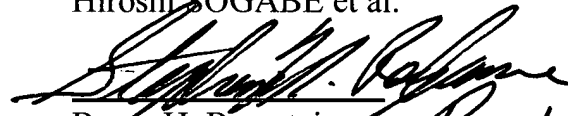
Newly added claims 12-15 define clearly non-obvious subject matter.

These claims define preferred values of, e.g. bond strength and latex concentrations are even more clearly patentable.

CONCLUSION

In view of the foregoing, it is believed that all of the claims in this application are in condition for allowance, which action is respectfully requested. If any issues yet remain which can be resolved by a telephone conference, the Examiner is respectfully invited to telephone the undersigned at the telephone number below.

Respectfully submitted,
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